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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 10/758,774 | 01/16/2004 | Bernard Hill | 426.54 | 6303 |
| 27019 7590 04/02/2007 THE CLOROX COMPANY P.O. BOX 24305 OAKLAND, CA 94623-1305 | | | EXAMINER PIZIALI, ANDREW T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1771 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 04/02/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|-------------------------------|-----------------------------|--|
| Office Action Summary | Application No. 10/758,774 | Applicant(s) HILL ET AL. | |
| | Examiner Andrew T. Piziali | Art Unit 1771 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-23,26-41,43,44,46-67 and 69-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-23,26-41,43,44,46-67 and 69-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 1/17/2007 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-19, 26, 32-37, 41, 43, 44, 46-61 and 74-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over HAYASE et al. (US 2002/0106478 A1) in view of TRAPASSO (US 4,172,173).

HAYASE et al. discloses a cleaning sheet, which comprises 10 to 90% by weight of thermoplastic fibers having a fineness of 10 to 150 dtex [9.01 - 135 denier; 1.11 tex=10 denier]. The cleaning sheet further comprises 10 to 90%, preferably 10 to 70% by weight of cellulosic fibers. (Abstract; [0026]) The thick thermoplastic fiber 2 includes conjugate fibers, such as core/sheath type or side-by-side type. [0027] The reference further teaches heat-fusible fibers having a fineness of about 0.5 to 5 dtex, relatively thinner than the thick thermoplastic fibers 2, in addition to the thick thermoplastic fiber 2 and the cellulosic fiber (3). Presence of such heat-fusible fiber is effective in preventing the thick thermoplastic fibers 2 from falling off and in improving scraping properties. The heat-fusible fiber is 1 to 50% by weight. [0036] The

Art Unit: 1771

reference teaches using an air-lay method and bonding the fibers of the air-laid web by fusion or with a binder. Useful binders include acrylonitrile-butadiene rubber, styrene-butadiene rubber, polyvinyl acetate, and ethylene-vinyl acetate copolymer and polyacrylate. [0037] Figure 4 shows one of the embodiments in which the thick thermoplastic fibers may be distributed with a gradient in the thickness direction. The cleaning sheet 1 can have the thick thermoplastic fibers in a larger amount in one side thereof than in the other side. [0069] HAYASE et al. further teaches that the cleaning sheet can be used either as a dry sheet free of liquid or a wet sheet impregnated or sprayed with liquid such as an aqueous detergent. [0040] The reference further teaches the use of surface active agents (surfactants). [0042-0043]

The Examiner equates the thick thermoplastic fibers of the reference to the claimed bicomponent fibers of the present invention; the heat-fusible binder fiber to the claimed thermoplastic fibers of about 2 to 6 denier and the cellulosic fibers of the reference meet the claimed range of the present invention.

With regards to the recited intended use limitations in claims 11-16, 55-58 and 95-100, it is the position of the Examiner that since prior art or record meets all of the structural limitations there is nothing on record to evidence that the cleaning sheet taught by HAYASE et al., would not function in the desired capacity. Applicant is invited to evidence otherwise. It is further noted that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ 2d 1647 (1987). It is the Examiner's position that the same applies to the cleaning sheet of HAYASE et al.

Art Unit: 1771

While HAYASE et al. teaches the use of acrylonitrile-butadiene rubber, styrene-butadiene rubber, polyvinyl acetate, ethylene-vinyl acetate copolymer, and polyacrylate as useful binders [0037], it fails to teach the use of a latex binder.

TRAPASSO et al. relates to enhanced ethylene-vinyl acetate latex compositions useful as binders for non-woven fabrics. (Col. 2, lines 43-45) The reference teaches that the nonwoven products of their invention are used as wiping cloths, among others. (Col. 2, lines 16-19) The reference discloses that commonly used lattices for non-woven fabrics are prepared from polymer of butadiene-styrene, butadiene-acrylonitrile, vinyl acetate, acrylic monomers, among others, but these have the drawback of cost. (Col. 2, lines 3-7) The reference teaches the use of enhanced ethylene-vinyl acetate binder latex compositions that are less expensive than those commonly used lattices and that produces softer non-woven fabrics. (Col. 2, lines 33-40)

Since TRAPASSO et al. is also directed to the construction of nonwoven materials suitable for wiping cloths, the purpose disclosed by TRAPASSO et al. would have been recognized in the pertinent art of HAYASE et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the type of binder used by HAYASE and provide with the latex binder of TRAPASSO et al. instead with the motivation of providing the nonwoven with a binder which produce non-woven fabric with a better "hand" as disclosed by TRAPASSO et al. (Col. 2, lines 33-39).

Although HAYASE et al. in combination with TRAPASSO et al. do not explicitly teach the claimed coefficients of static friction and kinetic friction it is reasonable to presume that these properties are inherent to cleaning sheet of HAYASE et al. as modified by TRAPASSO et al. Support for said presumption is found in the use of like materials (i.e. the cleaning sheet is formed from similar contents of the different fibers and is made by an air-lay method). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed properties of static and kinetic friction would obviously have been present on the HAYASE et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

4. Claims 20-23, 27-31, 62-67 and 69-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over HAYASE et al. and TRAPASSO as applied to claims 1, 4-19, 26, 32-37, 41, 43, 44, 46-61 and 74-79 above, and further evidenced by ADAM et al. (US 5,811,178).

While HAYASE et al. is silent to the bulk density of the cleaning sheet, it is the Examiner's position that the values claimed herein are recognized to be within the skill of one practicing in the art of cleaning wipes. This is evidenced by ADAM et al. that discloses a high sorbency nonwoven fabric used in the construction of oil wipes and teaches that the bulk density of the materials is generally within the range of up to about 0.1 g/cc, preferably up to about 0.06 g/cc. (Col. 2, lines 53-55)

5. Claims 38-40 and 80-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over HAYASE et al. and TRAPASSO as applied to claims 1, 4-19, 26, 32-37, 41, 43, 44, 46-61 and 74-79 above, and further in view of KILKENNY et al. (US 2003/0100465 A1).

HAYASE et al. is silent to the use of super-absorbent material.

KILKENNY et al. teaches cleaning wipes that include air-laid nonwoven web materials that can be made from a blend of wood pulp and synthetic fibers, bonded by binder. The reference teaches that the cleaning wipe can include super-absorbent material. (Page 3, first column)

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the material of HAYASE et al. and provide with super-absorbent material with the motivation of enhancing the fluid retention of the material during use.

Response to Arguments

6. Applicant's arguments filed 1/17/2007 have been fully considered but they are not persuasive.

The applicant asserts that there is no motivation to combine the binder latex of Trapasso with the web of Hayase, because the binder would produce a soft product while Hayase desires a product with scouring and scraping properties. The examiner respectfully disagrees. Hayase does not teach or suggest that the scouring and scraping properties are a result of the binder material. To the contrary, Hayase discloses that the scouring and scraping property is a result of the stiffness of the thick thermoplastic fibers. [0037] Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the type of binder used by HAYASE to provide the latex binder of TRAPASSO et al. instead, motivated by a desire to provide the product with a better "hand" and/or producing the product at a lower cost. (column 2, lines 33-39)

Conclusion

7. Applicant's amendment necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

atp

SPB 3/29/07

ANDREW PIZIALI
PRIMARY EXAMINER